MODIS sensor Working Group (MsWG) Meeting Summary May 2, 2007

Attendance: Gerhard Meister, Gene Eplee, Chris Moeller, Bryan Scott Blanchard, Eric Vermote, Zhengming Wan, Stuart Biggar, Bill Barnes, Gary Toller, Junqiang Sun, James Kuyper, Aisheng Wu, Vincent Chiang, Elena Novakovskaia, Brian Wenny

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Scheduled Agenda

Item 1: Recent L1B LUT delivery

- Terra forward update – 5.0.6.29 (4/23/07) – m1, RVS

Item 2: Instrument status

- Terra and Aqua MODIS are in nominal operations.
- Terra Solid State Recorder (SSR) Anomaly – On 2007/109 the Terra SSR experienced a PWA (Printed Wire Assembly) failure in the MISR science buffer. A decision made was to swap the DMU-1 and DMU-2 buffer allocations. The resulting impact on MODIS will be a gain of 3 supersets thus increasing the science buffer – which should lead to less data losses in the future. During the buffer swap, there will be an ~8 hour data loss. This should occur sometime in the next few weeks. If there are field campaigns or other important events in the near future for which Terra MODIS data is critical - let **BW** know so he can inform Flight Ops to avoid specific times for the buffer swap. **SB** has a field campaign on May 14-16, requests that time period be avoided. **CM** inquired if the Direct Broadcast data will still be transmitted – IOT will find out and relay that information.
- Non-recoverable Terra data loss:
  - 2007/109 22:49:54 – 23:02:03: SSR reallocation
  - 2007/113 19:52:22 – 20:01:23: Ground contact failure, buffer filled
  - 2007/113 21:48:29 – 15:34:24: Ground contact failure, buffer filled
  - 2007/117 15:18:31 – 15:34:24: SSR reallocation
- Three Aqua Inclination Adjustment Maneuver are completed. The one remaining maneuver is scheduled for approx. 1600 GMT on:
  - 2007/128 – Wed. 5/08
  - 2007/135 – Wed. 5/15 (backup)

Item 3: MCST recent activities

- Terra/Aqua data blocking: Initial block list (4 Terra, 3 Aqua events) finalized/approved. SDST has removed L0 and L1 data for these cases from public access. Reprocessing of higher level products that cross one of the time boundaries (example – 8-day products) and generation of OBC for MCST are proceeding at a low priority.
- Fill Value vs Interpolated L1B: Code for Terra has been delivered, Aqua in process. A science test data set of 1-day of granules will be generated.
- Space View DN analysis – MCST initial analysis on the Terra SV DN and DCR trend indicates the issue is not of immediate concern but may become increasingly of interest in the future (6-12 months). A presentation package will be sent to SBRS for consultation.
- Negative radiance values for TEB bands: Analysis showed the L1B negative radiances were within the expected allowed range of $-10\% * L_{max}(spec)$ to $110\% * L_{max}(spec)$, thus not believed to be a cause for concern.

Item 4: Around the Table

- The issue of a post-LUT-delivery QA/validation check on L1B production granules was raised by **BW**. One conclusion reached from the earlier Band 2 incident was that SDST & MCST should implement a new L1B validation check once a delivered LUT has gone into production in addition to a more stringent validation pre-delivery, to verify that the correct

LUT has been delivered and that the differences are on the order expected. Separate discussions between SDST & MCST resulted in the decision that this was a redundant check and not necessary. All present felt that MCST should implement some sort of QA check to monitor that the proper LUT has been put into production. Details of how this is achieved can be discussed offline at a separate meeting.

Next Meeting: ~May 16, 2007